

REMARKS

Reconsideration of this application is now being requested. Claim 1-6 are now in this application. Claims 7-8 have been canceled. Claims 1, 3 and 5 have been amended.

Claims 1-6 were rejected under 35 USC 102(b) as being anticipated by Brown et al (USP 5,537,474). In rejecting claim 1, the office action alleges five points. In particular, the office action alleges that (1) the step of “transmitting a first message to a first system” is taught by a mobile subscriber identifier (MSI) being transmitted by a serving base station; (2) “a second system indicator indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system” is taught by the GSM authentication protocol which is different from that of a typical US Digital Cellular (USDC) and by a subscriber unit roaming into GSM system which sends MSI to the serving base station; (3) the step of “receiving a second message from the first system having shared secret data associated with the subscriber” is taught by a home system that sends shared secret data to the visited system; (4) the step of “generating an expected response to a unique challenge using the shared secret data and an encryption algorithm” is taught by an 18 bit authentication response generated by the combination of a 32-bit random challenge and the SSD in a common algorithm; and (5) the step of “transmitting the expected response to the second system is taught by the authentication response communicated through the fixed network communication unit to the home system HLR. Applicant respectfully traverses. Claim 1 has been amended to make it clear that all the steps of claim 1 are being performed by an Interoperability/Interworking Function (IIF), and not by the first system, second system or a mobile station. Support for the amendment can be found at pages 4-8. Based on this amendment, applicant believes claim 1 can not be anticipated by Brown for the reasons alleged in the office action. In point (1), the office action alleges that the serving base station is, or is a part of, a first system. In Brown, the serving base station is the visited system. In point (2), neither the fact that the GSM authentication protocol is different than USDC nor a subscriber roaming into GSM system which sends its MSI to the serving base station teach indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system. Point (2) is merely a conclusion without an explanation of how the aforementioned difference between GSM and USDC authentication protocol and a roaming subscriber into GSM system is an indication of a subscriber attempting to gain access to a second system that uses an authentication process different

than an authentication process used by the first system. In point (3), the home system of Brown sends the SSD. The home system is not the visited system. As noted in point (1), the serving base station is the visited system, which would correspond to the first system in claim 1. The home system and the visited system are not parts of the same system. Since claim 1 requires both transmitting and receiving the first and second messages to and from the first system, respectively, Brown would need to teach both messages being transmitted to and from either the home system or serving base station. Brown does not teach this limitation. In points (4) and (5), the 18 bit authentication response is both generated by a subscriber unit and transmitted by the subscriber unit to the serving base station. As mentioned earlier, the serving base station has already been alleged in the office action to correspond to the first system (and not to the second system to which claim 1 requires the second message to be sent). Claim 1, as amended, generates the expected response at the IIF and transmits the expected response from the IIF to a second system.

With respect to claim 2, the office action alleges two points. In particular, the office action alleges that (1a) “an electronic serial number set to a default or null value” is taught by a mobile identification number (MIN) and an electronic serial number; and (2a) “a system access type parameter indicating that the subscriber is attempting to gain access in a GSM based wireless communication system” is taught by a visited system creating the necessary triplets. Applicant respectfully traverses. In point (1a), the electronic serial number of Brown is not set to a default or null value as required by claim 2. In point (2a), the necessary triplets of Brown are not being transmitted to the first system by an IIF, as required by claim 2 (which depends on claim 1, as amended).

With respect to claims 3 and 4, please see arguments for claims 1 and 2 since claims 3 and 4 are apparatus claims which substantially mirror the methods of claims 1 and 2. Additionally, in rejecting claim 3, the office action relies on a subscriber unit transmitting a SRES which is forwarded to a HLR/AuC located in a GSM system in order to show both “means for transmitting a first message to a first system” and “means for transmitting the expected response to the second system”. That is, claim 3 requires the first and second system to be different systems. Claim 3 has been amended to make such requirement more clear. Support for the amendment can be found at pages 5-8 and Figs. 1-4. By contrast, the subscriber unit is only transmitting the SRES to a single system. Thus, it does not meet the requirements of claim 3, as amended.

With respect to claim 5, amendments have been made to make clear that the first and second messages are being received from and transmitted to the IIF from the perspective of the first system. Support for the amendments can be found at pages 4-8. In rejecting claim 5, the office

Serial No. 09/851,101

action alleges that "an SRES is calculated using a received RAND" corresponds to the step of "transmitting a second message from the first system having the shared secret data". While it may be true that a subscriber unit calculates the SRES using the received RAND, applicant fails to understand how that relates to the alleged corresponding claim element. The subscriber unit of Brown transmits the calculated SRES. There is no disclosure in Brown which requires the subscriber unit to transmit the SSD, as would be required by the claim element. Furthermore, nothing in Brown teaches receiving and transmitting first and second messages to an IIF.

With respect to claim 6, please see arguments for claims 5 and 2.

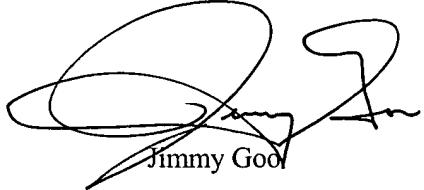
Accordingly, it is felt that claims 1-6 are patentable under 35 USC 102(b) over Brown et al.

Respectfully submitted,

Terry Jacobson

Douglas Rollender

Michael Marcovici



Jimmy Goo

Reg. No. 36,528

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